SEQUENCE LISTING

<110> STONE, EDWIN M.
SHEFFIELD, VAL C.

<120> MACULAR DEGENERATION DIAGNOSTICS AND THERAPEUTICS

<130> UIA-018.03

<140> 09/322,357
<141> 1999-05-28

<160> 74

<170> PatentIn Ver. 2.1

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Asp Ile Val Pro Asp Ala Cys Lys Gly Gly Met Lys Cys Val Asn His
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Tyr Gly Gly Tyr Leu Cys Leu Pro Lys Thr Ala Gln Ile Ile Val Asn
65                  70                  75                  80

Asn Glu Gln Pro Gln Gln Glu Thr Gln Pro Ala Glu Gly Thr Ser Gly
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Ala Thr Thr Gly Val Val Ala Ala Ser Ser Met Ala Thr Ser Gly Val
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Leu Pro Gly Gly Gly Phe Val Ala Ser Ala Ala Ala Val Ala Gly Pro
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Glu Met Gln Thr Gly Arg Asn Asn Phe Val Ile Arg Arg Asn Pro Ala
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Asp Pro Gln Arg Ile Pro Ser Asn Pro Ser His Arg Ile Gln Cys Ala
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Ala Gly Tyr Glu Gln Ser Glu His Asn Val Cys Gln Asp Ile Asp Glu
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Cys Thr Ala Gly Thr His Asn Cys Arg Ala Asp Gln Val Cys Ile Asn
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His Gln Arg Cys Val Asn Thr Pro Gly Ser Phe Tyr Cys Gln Cys Ser
225                 230                 235                 240

Pro Gly Phe Gln Leu Ala Ala Asn Asn Tyr Thr Cys Val Asp Ile Asn
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Glu Cys Asp Ala Ser Asn Gln Cys Ala Gln Gln Cys Tyr Asn Ile Leu
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Gly Ser Phe Ile Cys Gln Cys Asn Gln Gly Tyr Glu Leu Ser Ser Asp
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Arg Leu Asn Cys Glu Asp Ile Asp Glu Cys Arg Thr Ser Ser Tyr Leu
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Cys Gln Tyr Gln Cys Val Asn Glu Pro Gly Lys Phe Ser Cys Met Cys
305                 310                 315                 320

Pro Gln Gly Tyr Gln Val Val Arg Ser Arg Thr Cys Gln Asp Ile Asn
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Glu Cys Glu Thr Thr Asn Glu Cys Arg Glu Asp Glu Met Cys Trp Asn
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Tyr His Gly Gly Phe Arg Cys Tyr Pro Arg Asn Pro Cys Gln Asp Pro
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Tyr Ile Leu Thr Pro Glu Asn Arg Cys Val Cys Pro Val Ser Asn Ala
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Met Cys Arg Glu Leu Pro Gln Ser Ile Val Tyr Lys Tyr Met Ser Ile
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Arg Ser Asp Arg Ser Val Pro Ser Asp Ile Phe Gln Ile Gln Ala Thr
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Thr Ile Tyr Ala Asn Thr Ile Asn Thr Phe Arg Ile Lys Ser Gly Asn
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Leu Val Leu Val Lys Ser Leu Ser Gly Pro Arg Glu His Ile Val Asp
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<400> 37
aaatcttctg caaaaacaaa agtg 24

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<400> 38
ccaattaact gtctcctggc 20

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gccgggccag gccgcccgcc cgaaactggt accttgggct gcggtgcgat ccctggttcc 180
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gagaatcagt cgctttgggc tgcccctcca cacaacctgg gacttttaaa caaagctgtg 300
cgcagagaaa ggcgtggaaa tgccactttg agagtttgtg ctgggggatg tgagaagctc 360
tgagacatgt gagaaggtct agtattctac tagaactgga agattgctct ccgagttttg 420
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gttttttcct ttcgaccccc tctttctgca gcctgctttg taggtgcagt ataaaatgca 180
cgctgaatgt cttttgtatg taaacagcgt agcaggatgg agtaacgtga aatgcaattc 240
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ggaggggaga tgagaaagca gattggaagt tgagtatggt ggtagcctca gcctctccca 360
ccctcctttc ctcgcttgtg ctcactgcta aagttttgtt actttccccg cagcagatac 420
taaacattag tttgtcctgt attttctttg ag 452

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<211> 88
<212> DNA
<213> Homo sapiens

<400> 48
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ggacaccgaa gaaaccatca cgtacacg 88

<210> 49
<211> 1289
<212> DNA
<213> Homo sapiens

<220>
<223> "n" bases at various positions throughout the sequence may be a, t, c, g, other or unknown

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acacttcatt catgcttcat atctaagatt cgttgtaaat tgccccctg atcctttcaa 180
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caaattaatg ggtgtaagga actggaaaac ctggactcct accacatgca gataaaacca 360
atacgtgcag aataagactc aagtcaagta agaacgttaa acaccataaa gacacatggc 420
cttctttgtg tacatgacat gcattctcaa gtaagtggcc tttattgaat ttataaaggc 480
tatatattca ttctttttgt ataacttgat aattctaata aataaaggca gacaacagtt 540
tatgtgttac caggatgcat attggctaaa gtggttttaa aacgtaatgt gtgcaactcc 600
gttttgcatt ttctaattag cgtctctgat atttccaagt aatatttgat tagttagttg 660
cataggtgta accaatgttt aataaaatat taaaaagatc acctgacccc tcccactgct 720
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<213> Homo sapiens

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tanggagcng gtcaggggggg gaaanggagg ggctttaatn ctgtnanagg ntttnaaaaa 180
aaaaaaaaaa ntccngggct ggttngggggt gggggngggg gaaagggcca agaaaaaaaa 240
aaaaaatggt nttttttttt tttaacattt ccaatgtggg aaaaaaggca aattaataaa 300
gagcagtcag agaagttgga gaagattagt ctcaaaacag aaaagaagat ggtactgggc 360
anctgtacca aaaagaacag aagagtttag gcagctgatg gttgagaatg gacccccgaa 420
gctgtccaat gcacagactt gtcttttgaa aaaaaagcga tagaatgtta aaccacccat 480
ctcatcatat atctaggact ttagcacaag gattgttgcc ataagaatga agcttttaga 540
gtgatttctt agggaatgga cacaccaatt aactgtctcc tggccccacc tttgatgttt 600
tcttcacag 609

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<211> 49
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<210> 52
<211> 167
<212> DNA
<213> Homo sapiens

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ctcttcctgt cctgtctgtg ttataccaaa aaggcatgag cattatattt acatgtttga 120
tttttccctc ttagaaratt cctgacttat tttattactg accacag 167

<210> 53
<211> 387
<212> DNA
<213> Homo sapiens

<400> 53
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ctcagcagga aacacaacca gcagaaggaa cctcaggggc aaccaccggg gttgtagctg 180
ccagcagcat ggcaaccagt ggagtgttgc ccgggggtgg ttttgtggcc agtgctgctg 240
cagtcgcagg ccctgaaatg cagactggcc gaaataactt tgtcatccgg cggaacccag 300
ctgaccctca gcgcattccc tccaaccctt cccaccgtat ccagtgtgca gcaggctacg 360
agcaaagtga acacaacgtg tgccaag 387

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<213> Homo sapiens

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aattcggatc cacgttg 77

<210> 55
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<212> DNA
<213> Homo sapiens

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caaaaaacaa acagctacmg ggraacggta taatattaaa ggttgatwac acccagttat 120
tggttagatt tttagaaatt tgtcaatgga aattatctca aatacaatat attggatgga 180
aaagcaagta tcatacaatc tattaaaatt tttaacatac aaaacaatac catatgttct 240
aatggatgca tccctgtcta acaaaagtac aaaaacatct cagggaagga ttcattccta 300
ccgagacagt ggtagctgat gggtcaaggg atgaggatgg tgtgaggctt tagctgtatc 360
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tttataattt taaacatttc caatgcaaga acattataaa cttttaagaa taaagtwaaa 540
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<213> Homo sapiens

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tacggggatc ctttgcatgt cagtgccctc ctggatatca gaagcgaggg gagcagtgcg 120
tag 123

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<211> 206
<212> DNA
<213> Homo sapiens

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aagcattcca atcaaagcat tcatgtttct ttggagagtg gtagccaata attccttatt 120
tttttataga ctaccaatcc attttccaca ataacaagaa acaaccttaa aggttgaggc 180
aggagaaccc catgaagctt gaattc 206

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<211> 294
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ttcttaactc agaatacaaa gtatatttaa aatacatata ccctaatttt aacaaaatag 180
gaaattatta cttttaaaaa gagattttct ctacataggt tttctagata atgcttttca 240
gagaatgcta attcaataat ttggttctct ttgtgtgtgt gcctgataac ctag 294

<210> 59
<211> 120
<212> DNA
<213> Homo sapiens

<400> 59
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cattttattg ccagtgcagt cctgggtttc aattggcagc aaacaactat acctgcgtag 120

<210> 60
<211> 171
<212> DNA
<213> Homo sapiens

<400> 60
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gcagtatttc cagttttcta tgttcttgag taaatagttt ccatcgactt cccttcagca 120
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<212> DNA
<213> Homo sapiens

<220>

<223> "n" bases at various positions throughout the sequence may be a, t, c, g, other or unknown

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ggaaaaatgc cttttcaaca atattttcag tgctttagaa gcattgcaaa actccgtatg 180
ggttctcaaa ggcttatgtt ataattgtaa tggaatttaa cagaacccat ttaaaaaagt 240
taataaatag ccacagataa atcttccagt accagcattg cctgaagaag accatatcca 300
gtataagttg tcttatawca attatttata gaaattggca ttttgtwtct tgaaccaaca 360
aaagaaaaat ccgaatmccg gaaktgttat atttwttaga agcattaaat tcctttggan 420
agattnatca cacatcnnac taactgtcat tcctagaaaa aatatttcgg tatttccnaa 480
agaagtatat gacagacgtt tgtagttgtt cccacaaata tganaccnaa atggatgttc 540
tccagtgagc ttctgcaggg caaataattc agctagggaa ttactcactt gtcagcagat 600
gacgtaggta caaaagagta aggatatgtt taaagtstay mtatatmtgt gtgtgtatay 660
atatacatat acaymwmymt atayatamra ttttttttcwa g 701

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<213> Homo sapiens

<400> 62
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cattcatctg tcagtgcaat caaggatatg agctaagcag tgacaggctc aactgtgaag 120

<210> 63
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<212> DNA
<213> Homo sapiens

<400> 63
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tctgattatg tacccattta tgaaaacaaa cgcttaccca tgggaattct gttctaaaat 120
ccagttaatg tagttcagtt gttacattgc ctttttagtg tgttaccaag aaaaaggaaa 180
agaaataaaa ataactgaaa tattaggtgc aggctggctc taataattag aaagggtgct 240
ctagcatgtt gcgtctcagt gtgttatcca gtgaccaggt atgtcagcac ctcctgggag 300
cttatgagaa atgcagaatc tcaggctgca acccagacct cctgagtctg aatctacatt 360
caacaaaaac tgcaggtgac tggtgtgcac atttaagttt cagaatagcc aagtgcatgt 420
caaaacatta aaataaaaat caggagatct ggtttctggt tctattcctg ctactgtgtg 480
acttgggcac atttcttgag ttgcctgggt ttcactttcc acatgaacaa gaggagggcc 540
atttaactag attcatgacc ttcagggtcc attgcatgtg cacatttcgt tatataattc 600
aaaaggcatt agacatcctg agggggatgc cacagacact tgatgtccct gacctcctca 660
cggttcactc agctttacac aaagctcaaa ccccaccgag agaggcctca catcatgcca 720
ttacactcaa aactgaaaga ggctacctca ggacagctgc ctctgccctt ctgagtaaac 780
tgtagggaca tcactattca gaaatgcaaa gcattcttcc cctgaaagtc agatcctgcc 840
aagctgtcat tctggaagct tgcacaggtt aggggacttg gcattcaaag ctcaaatgaa 900
cttggcttca aagtcaccca atttctgaga agacaaacat gaactctaca tcctggatgg 960
gtctgcagag tccaaaatga aggccgtcaa ccacaagcca attcattcag tagtgtagtt 1020
aggtccagga ttagccaaat tgtcagcaat gattcagtaa aagtcatgat aagaaaaact 1080
ttttgtgcta tgaagtcata gagggaaata agctgatatt gttagaattt gccttttagc 1140
tgcttataaa gttttgtatt tctatttcag aatttgcaat atttttactc tctttagctc 1200
acctcaaaag tgtattactt cctctggact gttgagcaga aca 1243

<210> 64
<211> 312
<212> DNA
<213> Homo sapiens

<220>
<223> "n" bases at various positions throughout the sequence may be a, t, c, g, other or unknown

<400> 64
aaaaaaatat atatgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtatatta aacccagnca 60
acttaaaaaa tgtgcccaag tcacacagtc gcaggaatag gacaanaagc cagatctctt 120
tatatatata taggtagata taatttttcc tccttanaat ataaataatt ttaattatat 180
ataattattt taatatagat attttaaatc ttataattta tatatatata taatttatat 240
atatatatat atccaaagta gtggtgcaca aacttttcaa ctctgtgtcc tttctcttgt 300
ctaattcaac ag 312

<210> 65
<211> 120
<212> DNA
<213> Homo sapiens

<400> 65
acattgatga atgcagaacc tcaagctacc tgtgtcaata tcaatgtgtc aatgaacctg 60
ggaaattctc atgtatgtgc ccccagggat accaagtggt gagaagtaga acatgtcaag 120

<210> 66
<211> 973
<212> DNA
<213> Homo sapiens

<220>
<223> "n" bases at various positions throughout the sequence may be a, t, c, g, other or unknown

<400> 66
gtaagtttat ttttttttc atatgttagg tatttagttt tagccaggaa gagacaagag 60
gaagttatag gattctccta tagactttca tttttcccac tttcaatata caatttaagc 120
tntttttcc cctgttcatc ataaaatata tacatctcat aaagagggga ttctatgcta 180
angccgacnt ttttcgtcct taaaagataa ataattttaa taaaatattg atatgtattc 240
tatgtaacct acatcatctn tttgagatac atcttcaaat catccactgg aaaagattca 300
gttattaaaa ngtttcacct gtgagtttga gtttanagca taagctcaat atgggagtta 360
aacatacctc catccagtct tagccctcta aaacncangg attataaatt gcgtaaaaat 420
gtaggtgctg aaaaaagtca gcctaatatg ttgtaaaata tagttgaata ttttagagaa 480
aactactagc cccaaaatag ctaatgacct tgggtccagt ttcaaaataa acattcagat 540
gatcttcaca cctatacgta agkggaagag gcagctcccc acaatggtat gatttcagag 600
tttctcagga agatctaaaa aaaaaaagga ccctacctcc aatgttgcat gtagttgaaa 660
attttcttaa cagggaaagg actgtcanat aaaaccaaaa acgtaaaaaa tcctggaaaa 720
gctagtncaa acncttaaat ttacncaaag caccaaaaga atgaaaaaat gaccaanctt 780
gacanaaaac ctgtttgaat cccagctcca ctgtnttcag tctgcncaat nttgaacaaa 840
ttatcaaact actntgagcc tcagnttcct catttggaaa agggagttgg gggaatttag 900
gggaatanca tncntaaaaa tantttgtaa actataaagc ttgtncaggt caaggggttt 960
ttatnaaatt tac 973

<210> 67
<211> 766
<212> DNA
<213> Homo sapiens

<400> 67
agcctcttcc ttaacttcct ctttttcctt acagtcctaa aattgctatg ctctatgagg 60
tggaacactt catagtttca cttcctgtgc tgtgcttcct ctggacagta taatccactc 120

ccagcatgct tcagcttact gaaaccagat ttctagcctt tacctttctc ccaagttcct 180
gaaagagatg ataagctgcc ctccatagtt tatgcttcct gatttctcag cttggaaagc 240
cttccctgcc ccagccatga aaactccatc taaccaccac ccttcaaggc cacgttgaga 300
tgcctcttcc ttccttcagc cttccctaat ccccctggca aaattaccca actctgctcc 360
acatgcccca gtatacttat ctatctctta cttaattcca ttttactttc taagtaatca 420
tatacacatt ccctcaatta taatgtccct gatgacaaga actggtgttt aacttttata 480
taggcagagt cagtggttaa cattggggtt tgaattcaac agatgaacaa taggtgcttg 540
ataaaatatc atgaaatgac acatattaat ctgcctagaa tgtctcagct ctgtctgtcc 600
tgaattcaat acaatgaaca cccagtcttg tgtctaaaag caggttgaac acagtccaga 660
tgctctcaca cctccttcct tgcaaacaga atctgccagt tatatgattt aattagatca 720
gttcattagt ttagttagta aactctttga ccctacatct ctacag 766

<210> 68
<211> 124
<212> DNA
<213> Homo sapiens

<400> 68
atataaatga gtgtgagacc acaaatgaat gccgggagga tgaaatgtgt tggaattatc 60
atggcggctt ccgttgttat ccacgaaatc cttgtcaaga tccctacatt ctaacaccag 120
agaa 124

<210> 69
<211> 84
<212> DNA
<213> Homo sapiens

<400> 69
gtaagaaaaa tcagaacttt tgaaagtgag gattttctgg tcttaccaag ccaaactgct 60
gaatactttt gtttgtctct gcag 84

<210> 70
<211> 196
<212> DNA
<213> Homo sapiens

<400> 70
ccgatgtgtt tgcccagtct caaatgccat gtgccgagaa ctgccccagt caatagtcta 60
caaatacatg agcatccgat ctgataggtc tgtgccatca gacatcttcc agatacaggc 120
cacaactatt tatgccaaca ccatcaatac ttttcggatt aaatctggaa atgaaaatgg 180
agagttctac ctacga 196

<210> 71
<211> 979
<212> DNA
<213> Homo sapiens

<220>
<223> "n" bases at various positions throughout the sequence may
be a, t, c, g, other or unknown

<400> 71
gtaagtatcc tgaaggcagc cttaactatt gagaaagatg ggagtttgtt gttgttgttg 60
ttgttgttgt tgttgtgtgg tatccacatg tggaaggaaa gcaaacattt aaaagtgtct 120
tnatgtgtag gcattgtgta aggccttcca gctacattat ttcatttatt cctcttggta 180
acactgccag atagatatta atattcatct ccatttttta cagaggagaa aagtgagatg 240
cagaaagatt aagtagcatc cctgaaatca ctcaaatatt aagtttggca gactctgata 300
gagttgtgtg tgaccacgaa aatacaagcc tcccatcccc ccgcctctgc ccccacccaa 360

catacccccc aagtaggtat cactaatcat tgatggttaa ttaattatac atagacatac 420
atataattca aacccaaaat aattcctgga gctcctaaag agtttttcag acatcatgaa 480
ttcatcattg ttacattcac aagacagttt gtgttcacac cgaaactaaa acctataagt 540
atgtgagaag tgaccccacc tccccgcaca gtatgtgtca agtagttgta ccttcttgcc 600
aacttctggg ctggcagtat ggagtcatct ccctatcttt cattgcctgt gtgaaatcta 660
ctttctgaat tctgccattt ccctcttcac actgtctcct gggttatctt tgcttcctca 720
catccctatc tctcttccta taaactggct cccgtcactt ccatgatccc ttcagtggct 780
tctgagctgg tctccctgac cccaaagcct cagccttcca gtctccctac aaaatctcag 840
caagttcatt ttaaggttaa aatttggaca tattttaaat acggctcacc acttcatgtg 900
aaaatgatgg caccctacca agcagtttgc agagttaccg gtaactgttt catgctaatg 960
atgttaytca tccagttac 979

<210> 72
<211> 418
<212> DNA
<213> Homo sapiens

<220>
<223> "n" bases at various positions throughout the sequence may be a, t, c, g, other or unknown

<400> 72
tccctttttt ttttcyttct aaaaaggnaa ccnatggccc aagnttgnaa aaanaaaaag 60
ggccnctttg ntttccaggt ttaaaaattt ccnattttcc cctwaagttt agkttttgga 120
aaggccccca cttcnccann aaaaggaaaa aaaatgntta cmaanagggg gggattcaaa 180
acnaaaaact ttttaaaaa aaaaaaaaag caagtccttg aaacttggag ctaatgactg 240
tattagacaa gggataagag ccaagaagag ttgaaaccaa gaagggacca agtagtggct 300
cttttatacc accttcaaaa ttctcccccc aattcttata ggaggtatac taacaaagca 360
tagaaactcc aatccaagaa aattattctc ttcctttctc tattttcttt tattttag 418

<210> 73
<211> 162
<212> DNA
<213> Homo sapiens

<400> 73
caaacaagtc ctgtaagtgc aatgcttgtg ctcgtgaagt cattatcagg accaagagaa 60
catatcgtgg acctggagat gctgacagtc agcagtatag ggaccttccg cacaagctct 120
gtgttaagat tgacaataat agtggggcca ttttcatttt ag 162

<210> 74
<211> 1111
<212> DNA
<213> Homo sapiens

<400> 74
tcttttctaa gagtcaacca caggcattta agtcagccaa agaatattgt taccttaaag 60
cactatttta tttatagata tatctagtgc atctacatct ctatactgta cactcaccca 120
taacaaacaa ttacaccatg gtataaagtg ggcatttaat atgtaaagat tcaaagtttg 180
tctttattac tatatgtaaa ttagacatta atccactaaa ctggtcttct tcaagagagc 240
taagtataca ctatctggtg aaacttggat tctttcctat aaaagtggga ccaagcaatg 300
atgatcttct gtggtgctta aggaaactta ctagagctcc actaacagtc tcataaggag 360
gcagccatca taaccattga atagcatgca agggtaagaa tgagttttta actgctttgt 420
aagaaaatgg aaaaggtcaa taaagatata tttctttaga aaatggggat ctgccatatt 480
tgtgttggtt tttattttca tatccagcct aaaggtggtt gtttattata tagtaataaa 540
tcattgctgt acaacatgct ggtttctgta gggtattttt aattttgtca gaaattttag 600
attgtgaata ttttgtaaaa aacagtaagc aaaattttcc agaattccca aaatgaacca 660
gataccccct agaaaattat actattgaga aatctatggg gaggatatga gaaaataaat 720

tccttctaaa ccacattgga actgacctga agaagcaaac tcggaaaata taataacatc 780
cctgaattca ggcattcaca agatgcagaa caaaatggat aaaaggtatt tcactggaga 840
agttttaatt tctaagtaaa atttaaatcc taacacttca ctaatttata actaaaattt 900
ctcatcttcg tacttgatgc tcacagagga agaaaatgat gatggttttt attcctggca 960
tccagagtga cagtgaactt aagcaaatta ccctcctacc caattctatg gaatatttta 1020
tacgtctcct tgtttaaaat ctgactgctt tactttgatg tatcatattt ttaaataaaa 1080
ataaatattc ctttagaaga tcactctaaa a 1111